

A CONTRIBUTION TO THE KNOWLEDGE OF THE  
ALTICINAE OF THE CANARY ISLANDS  
(COLEOPTERA: CHRYSOMELIDAE)

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ABSTRACT

Taxonomic and biogeographic data are given for 5 species of flea beetles from the Canary Islands. Male genitalia are illustrated for *Longitarsus nubigena* Wollaston. *L. persimilis* Wollaston is removed from synonymy with *L. isoplexidis* Wollaston, and *L. stenocyphon* Wollaston is placed as a subspecies of *L. persimilis*. *L. pallidicollis* Wollaston is a subspecies of *L. stragulatus* Foudras, and *L. pseudodorsalis* Lindberg is a synonym of *pallidicollis*; a key to subspecies of *L. stragulatus* is given. Presence of *L. aeneus* Kutschera on the Canary Islands is confirmed.

This paper offers taxonomic and biogeographic data about 5 species of flea beetles from the Canary Islands. We are indebted to Pedro Oromí for loan of specimens from his collection and from that of the Museo de Historia Natural of Tenerife. Our thanks also go to Carlo Leonardi of Museo Civico de Storia Naturale of Milan, Sharon Shute of the British Museum of Natural History of London, Nicole Berti of Muséum National d'Histoire Naturelle of Paris, and Serge Doguet of Fontenay sous bois (France) for assistance.

*Aphthona crassipes* Wollaston

*A. crassipes* Wollaston, 1860, Journ. Ent. I, p. 3

Wollaston (1860) reported a rather large size for the specimens, namely "2 1/3–2 2/3 lin." (5.3–6 mm.). We consider, as Heikertinger (1944) did, that Wollaston erred, and we take the view that the real length of this leaf beetle is considerably smaller.

The only specimen we had at our disposal was a male, labelled: "Hierro, El Tesoro, 21.V.1963, leg. J. M. Fernández". It coincides with Wollaston's description, except for the body length, as well as with Heikertinger's (including the shape of the aedeagus).

The species has been known only from Tenerife and La Palma Islands. Thus, it is new to the fauna of Hierro Island.

*Longitarsus nubigena* Wollaston

*L. nubigena* Wollaston, 1854, Ins. Mader., p. 447.

This species was described by Wollaston on the basis of female specimens only. Its description was recently expanded by Leonardi (1973), who examined female specimens from Madeira and Tenerife and illustrated the spermatheca.

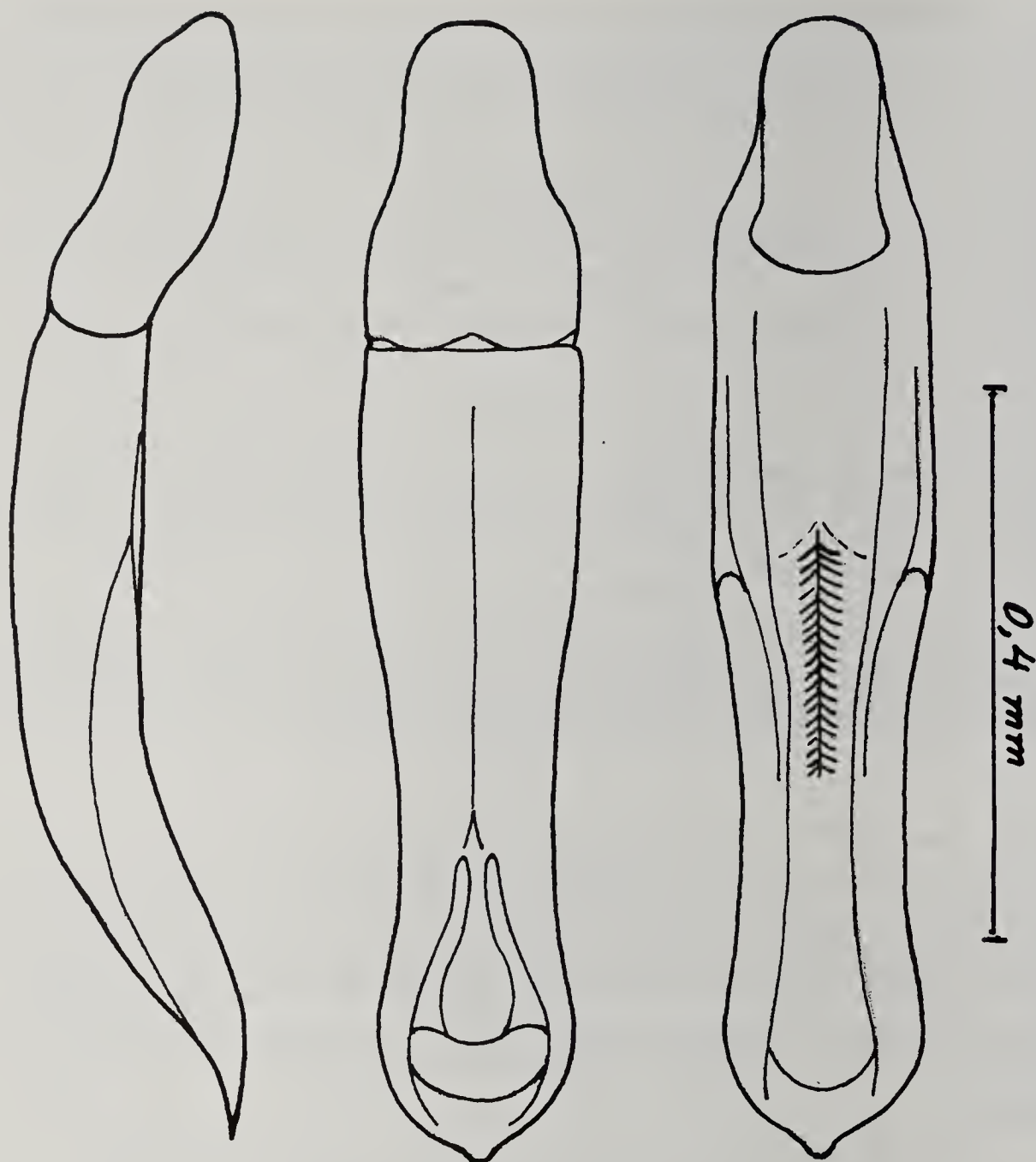
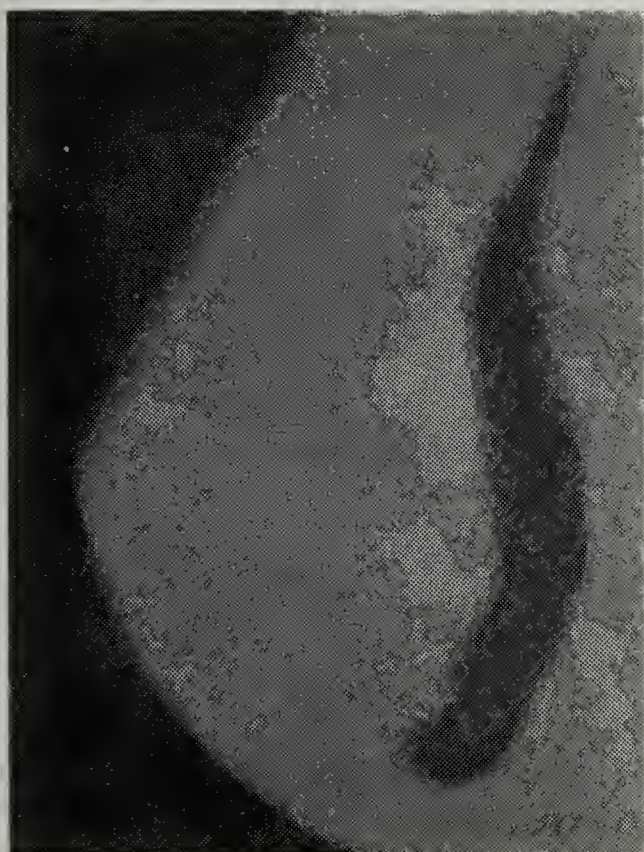
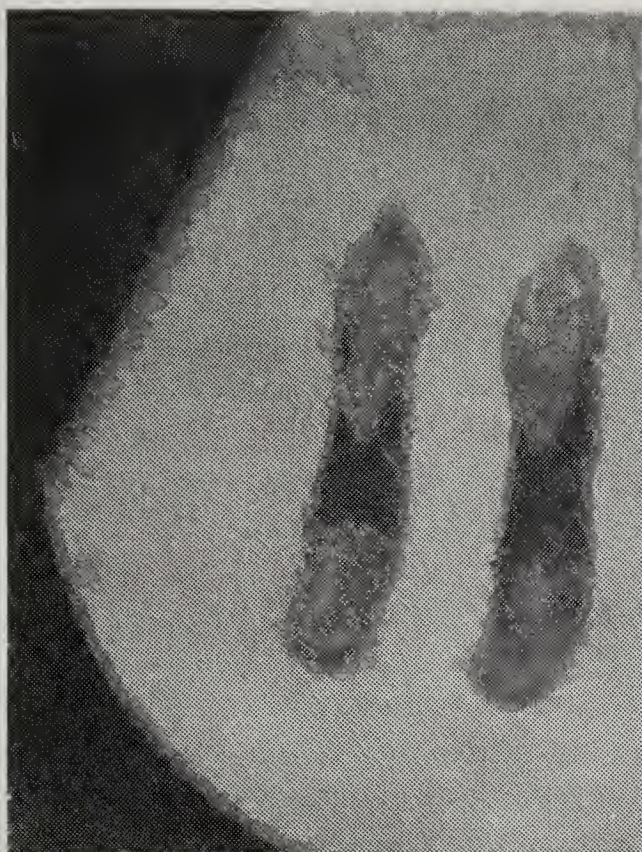


Fig. 1, Aedeagus of *Longitarsus nubigena* Wollaston (Tenerife; drawn by C. Leonardi): ventral, dorsal, lateral.

We had four specimens at our disposal, labelled: "Tenerife, Anaga, 29.V.1975, leg. J. M. Fernández", 1 male; "Gomera, Hermigua, 12.IV.1974, leg. P. Oromí", 1 female; "Gomera, Hermigua, 7.V.1962, leg. J. M. Fernández", 1 male; and "Gomera, El Rejo, 24.XII.1971, leg. P. Oromí" 1 male. Dr. Leonardi identified the two male specimens, and we investigated the spermatheca of the female which turned out to be identical to that illustrated by Leonardi (1973).

Leonardi (1973) noted that *L. nubigena* has been incorrectly associated with the group of *L. lycopi* Foudras/*L. membranaceus* Foudras. He classified it as belonging to the group of *L. pellucidus* Foudras. His decision has been confirmed by examination of the aedeagus of our male specimens because the aedeagus shape of *L. nubigena* is quite similar to that of *L. pellucidus*. Original drawings of the *L. nubigena* aedeagus, made by Dr. Leonardi, are given herein for the first time (Fig. 1-a, b, c).





Figs. 2-4, Aedeagus of *Longitarsus* spp., 25X (photos by S. Shute): 2, *L. isoplexidis* Wollaston (Madeira; a, ventral; b, lateral); 3a, *L. persimilis stenocyphon* Wollaston (Cape Verde Is.; ventral); 3b, *L. p. persimilis* Wollaston (Tenerife; ventral); 4a, *L. p. stenocyphon* (lateral); 4b, *L. p. persimilis* (lateral).



*Longitarsus persimilis* Wollaston, status resurrected

*L. persimilis* Wollaston, 1860, Journ. Ent. I, p. 4

This form has been regarded as a subspecies of the Madeiran species *L. isoplexidis* Wollaston, 1854 (Heikertinger and Csiki 1940). After a comparative examination of the aedeagus of type specimens of *L. isoplexidis* and *L. persimilis* from the British Museum, we consider them two valid species. The clear difference in aedeagus form gives strong support to the assumption that reproductive isolation between both taxa exists (Fig. 2-a, b; Fig. 3-b; Fig. 4-b).

We treat here one more question relative to these two species. The form *stenocyphon* Wollaston, 1867, from the Cape Verde Islands has been considered a subspecies of *L. isoplexidis* Wollaston (Heikertinger and Csiki 1940). We define it here as *Longitarsus persimilis stenocyphon* Wollaston, 1867, Comb. nov. after the examination of type specimens from the British Museum. The aedeagus of *stenocyphon* does not differ significantly from that of *persimilis* (Fig. 3-a; Fig. 4-a). However, it is very different from the aedeagus of *L. isoplexidis*. We note also the reciprocal geographical position of Madeira, the Canary Is., and the Cape Verde Is. inhabited by *isoplexidis*, *persimilis*, and *stenocyphon*, respectively.

*Longitarsus stragulatus pallidicollis* Wollaston

*L. dorsalis* (Fabr.) *sensu* Wollaston, 1860, Jour. Ent. V, 1, p. 8; 1864, Cat. Can. Col., p. 413.

*L. circumseptus* var.  $\beta$  *pallidicollis* Wollaston, 1865, Coleoptera Atlantidum, p. 369.

*L. pseudodorsalis* Harald Lindberg, 1950, Soc. Sci. Fenn. Comment. Biol. 10, 18, p. 16, syn. nov.

This form was first regarded by Wollaston (1860) as identical with *dorsalis* (Fabr.), and later (1865) as "var.  $\beta$  *pallidicollis*" of *L. circumseptus* (Allard) (= *stragulatus* Foudras). Wollaston observes in his second paper: "... The Canarian examples however differ from the Algerian one now before me in having their prothorax testaceous instead of black ... I feel satisfied that this peculiarity is merely a geographical one and is totally insufficient to indicate a distinct species", and then in a footnote: "... and I would therefore acknowledge this slight insular modification of the *circumseptus* by recording it as the var.  $\beta$  *pallidicollis*".

Lindberg (1950) redescribed this form and raised it to species rank, ignoring the designation *pallidicollis* suggested by Wollaston.

We have studied two specimens from the Tenerife Museum, labelled: "Fuerteventura, Cumbre Jandía, 4.V.1975, leg. P. Oromi" as well as five specimens from the Paris Museum: "Iles Canaries, Lanzarote, Ch. Alluaud, 1890, *Longitarsus pallidicollis* Woll., Peyerimhoff det.". All these specimens possess testaceous pronota, but the shape of the aedeagus does not differ from that of the typical form of *L. stragulatus*. On the basis of the invariable color of the pronotum, we consider "*pallidicollis*" as an isolated geographical race, allopatric to the other known forms that will be mentioned below. Thus, it is better regarded as a subspecies rather than "a slight insular modification", according to Wollaston, or a species as termed by Lindberg.

Another subspecies of *L. stragulatus* has been briefly described by Peyerimhoff (1915) as: "*Thyamis stragulata punica*, n.subsp.—Proles aptera, non aliter quam foliis Othonnopsis cheirifoliae victitans". Therefore, *L. stragulatus* is a polytypic species with three subspecies: *stragulatus* s.str. (South-western Europe, Sicily, Sardinia, Malta), *punicus* (Algeria, Tunisia), and *pallidicollis* (Canary Is.: Lanzarote, Gran Canaria, Fuerteventura), differentiated according to the following key:

- 1(4) Pronotum black
- 2(3) Winged ..... ssp. *stragulatus* s.str.
- 3(2) Apterous ..... ssp. *punicus*
- 4(1) Pronotum testaceous ..... ssp. *pallidicollis*

### *Longitarsus aeneus* Kutschera

*L. aeneus* Kutschera, 1862, Wien. Ent. Monatschr. VI, pp. 103, 107.

Heikertinger (1914) had certain doubts about the existence of this species in the Canary Islands. We have come upon two specimens, a male and a female, from Tenerife (Bajamar, 23.II.1965, leg. J. M. Fernández) that undoubtedly are *L. aeneus* according to the aedeagus.

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